Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): An information processing apparatus, comprising:

a sensor for detecting an object, the sensor configured to continuously sense a sensor effective area;

an object-identifying unit which obtains an ID corresponding to the object within the sensor area, the ID based on information input from the sensor ~~so as to repeatedly~~ and the object-identifying unit configured to output the obtained ID based on the information input from the sensor; and

an information processing unit which ~~repeatedly~~ receives the ID from the object-identifying unit so as to perform a program corresponding to the ID;

wherein the information processing unit compares a program that is set based on a newly-input ID with a program that is set based on an already-input ID from the object-identifying unit, and ends a currently-executed program when the two programs are different from each other.

2. (original): An information processing apparatus according to claim 1, wherein the information processing unit compares the program that is set based on the newly-input ID with the program that is set based on the already-input ID from the object-identifying unit, and ends the currently-executed program so as to start the program that is set based on the newly-input ID when the two programs are different from each other.

3. (original): An information processing apparatus according to claim 1, further comprising an ID/internal-state correspondence storage unit for storing a processing information table in which IDs to be obtained by the object-identifying unit are associated with paths of execution files, wherein the information processing unit searches the ID/internal-state correspondence storage unit based on the ID input from the object-identifying unit so as to determine a program to be executed.

4. (currently amended): An information processing apparatus according to claim 1, wherein the sensor detects the object in ~~a~~the sensor effective area serving as an object recognizing area, the object-identifying unit outputs a special ID indicating absence of an object to the information processing unit when information received from the sensor does not include object information from which an ID can be obtained, and the information processing unit sets a next program to null based on the special ID.

5. (original): An information processing apparatus according to claim 1, wherein the information processing unit starts an application program that is set based on the ID input from the object-identifying unit, compares an application program that is set based on the newly-input ID with an application program that is set based on the already-input ID from the object-identifying unit, and ends the currently-executed application program when the two application programs are different from each other.

6. (original): An information processing apparatus, comprising:

a sensor for detecting objects;

an object-identifying unit which obtains first and second IDs corresponding to the objects based on information input from the sensor so as to repeatedly output the obtained first and second IDs based on the information input from the sensor; and

an information processing unit which repeatedly receives the first and second IDs from the object-identifying unit so as to perform a program corresponding to the first and second IDs,

wherein the information processing unit sets a communication protocol corresponding to the first ID input from the object-identifying unit and sets a connected party corresponding to the second ID input from the object-identifying unit, and when at least one of a communication protocol and a connected party corresponding to first and second newly-input IDs from the object-identifying unit is different from at least one of a communication protocol and a connected party corresponding to first and second already-input IDs, the information processing unit changes the communication protocol or the connected party based on the corresponding newly-input ID.

7. (original): An information processing apparatus according to claim 6, further comprising an ID/internal-state correspondence storage unit for storing a processing information table including data of correspondence between IDs to be obtained by the object-identifying unit and communication protocol information and data of correspondence between IDs to be obtained by the object-identifying unit and connected party information, wherein the information processing unit searches the ID/internal-state correspondence storage unit based on the first and second IDs input from the object-identifying unit so as to obtain information of corresponding communication protocol and connected party.

8. (currently amended): An information processing apparatus according to claim [[1]]8, wherein the object-identifying unit comprises an ID-determining unit for obtaining an ID corresponding to the object and an object presence determining unit for determining presence of the object in a sensor detecting area, and wherein the information processing unit controls processing based on ID information determined by the ID-determining unit and on presence determination information of the object determined by the object presence determining unit, ends the currently-executed program when the program corresponding to the newly-input ID based on ID information determined by the ID-determining unit is different from the program corresponding to the already-input ID and when the object presence determining unit determines absence of the object, and continues the currently-executed program when the program corresponding to the newly-input ID based on the ID information determined by the ID-determining unit is different from the program corresponding to the already-input ID and when the object presence determining unit determines presence of the object.

9. (currently amended): A communication processing apparatus performing communication processing, the apparatus comprising:

a sensor configured to continuously sense a sensor effective area and for detecting first and second objects positioned within the sensor effective area;

an object-identifying unit which obtains first and second IDs corresponding to the first and second objects based on information input from the sensor, the object-identifying unit configured to ~~so as to repeatedly~~ output the obtained first and second IDs based on the information input from the sensor; and

an information processing unit configured to receive ~~which repeatedly receives~~ the first and second IDs from the object-identifying unit, the information processing unit further configured ~~so as~~ to perform a program corresponding to the received IDs;

wherein the information processing unit sets a communication protocol corresponding to the first ID input from the object-identifying unit and sets a connected party corresponding to the second ID input from the object-identifying unit.

10. (currently amended): ~~A communication processing apparatus according to claim 9, wherein,~~ A communication processing apparatus performing communication processing, the apparatus comprising:

a sensor for detecting objects;

an object-identifying unit which obtains first and second IDs corresponding to the objects based on information input from the sensor, so as to repeatedly output the obtained first and second IDs based on the information input from the sensor; and

an information processing unit which repeatedly receives the first and second IDs from the object-identifying unit so as perform a program corresponding to the IDs;

wherein the information processing unit sets a communication protocol corresponding to the first ID input from the object-identifying unit and sets a connected party corresponding to the second ID input from the object-identifying unit, and wherein when at least one of ~~a~~the communication protocol and ~~a~~the connected party corresponding to first and second newly-input IDs from the object-identifying unit is different from at least one of a communication protocol and a connected party corresponding to first and second already-input IDs, the information processing unit changes the communication protocol or the connected party based on the corresponding newly-input ID.

11. (currently amended): An information processing method, comprising:

~~an object~~ identifying an object;~~step of~~

obtaining an ID corresponding to ~~an~~the object based on information input from a sensor when the object is within a continuously sensed sensor effective area;~~, which detects the object, and repeatedly~~

outputting the obtained ID to an information processing unit based on the information input from the sensor; and

communicating the ID to an information processing unit~~step of repeatedly receiving the ID obtained in the object identifying step~~ and performing a program corresponding to the ID;

wherein~~, in~~ the information processing ~~step,~~ unit compares a program that is set based on a newly-input ID ~~is compared~~ with a program that is set based on an already-input ID, and a currently-executed program is ended when the two programs are different from each other.

12. (currently amended): An information processing method according to claim 11, wherein~~, in the information processing step,~~ communicating the ID includes comparing the program that is set based on the newly-input ID ~~is compared~~ with the program that is set based on the already-input ID, and the currently-executed program is ended so as to start the program that is set based on the newly-input ID when the two programs are different from each other.

13. (currently amended): An information processing method according to claim 11, ~~wherein, in the information processing step,~~ further comprising storing a processing information table in an ID/internal-state correspondence storage unit, the ~~for storing a~~ processing information table ~~in which~~ stores IDs that are associated with paths of execution files is searched based on the input ID so as to determine a program to be executed.

14. (currently amended): An information processing method according to claim 11, wherein the sensor detects the object in ~~a~~the sensor effective area serving as an object recognizing area, wherein in the object identifying step, a special ID indicating absence of an object is output to the information processing unit when information received from the sensor does not include object information from which an ID can be obtained, and wherein in the information processing step, a next program is set to null based on the special ID.

15. (currently amended): An information processing method according to claim 11, wherein~~, in the information processing step,~~ communicating the ID includes starting an application program that is set based on the input ID ~~is started~~, an application program that is set based on the newly-input ID is compared with an application program that is set based on the already-input ID, and the currently-executed application program is ended when the two application programs are different from each other.

16. (original): An information processing method, comprising:

an object identifying step of obtaining first and second IDs corresponding to objects based on information input from a sensor, which detects the objects, and repeatedly outputting the obtained IDs to an information processing unit based on the information input from the sensor; and

an information processing step of repeatedly receiving the first and second IDs obtained in the object identifying step and performing a program corresponding to the first and second IDs;

wherein, in the information processing step, a communication protocol corresponding to the first ID is set and a connected party corresponding to the second ID is set, and when at least one of a communication protocol and a connected party corresponding to first and second newly-input IDs is different from at least one of a communication protocol and a connected party corresponding to first and second already-input IDs, the communication protocol or the connected party is changed based on the corresponding newly-input ID.

17. (original): An information processing method according to claim 16, wherein, in the information processing step, an ID/internal-state correspondence storage unit for storing a processing information table including data of correspondence between IDs and communication protocol information and data of correspondence between IDs and connected party information is searched based on the input first and second IDs so as to obtain information of corresponding communication protocol and connected party.

18. (currently amended): An information processing method according to claim [[11]]16, wherein the object identifying step further includes an ID determining step of obtaining an ID corresponding to the object and an object presence determining step of determining presence of the object in a sensor detecting area, and wherein in the information processing step, processing is controlled based on ID information determined in the ID determining step and on presence determination information of the object determined in the object presence determining step, the currently-executed program is ended when the program corresponding to the newly-input ID is different from the program corresponding to the already-input ID and when absence of the object is determined in the object presence determining step, and the currently-executed program is continued when the program corresponding to the newly-input ID is different from the program corresponding to the already-input ID and when presence of the object is determined in the object presence determining step.

19. (currently amended): A communication processing method, comprising:

~~an object identifying step of~~ obtaining first and second IDs corresponding to objects based on information input from a sensor when the objects are located within a continuously sensed sensor effective area~~, which detects the objects, and repeatedly~~

outputting the obtained first and second IDs to an information processing unit based on the information input from the sensor; and

~~an information processing step of repeatedly~~ receiving the first and second IDs obtained ~~in the object identifying step~~ and performing a program corresponding to the IDs,

wherein~~, in the information processing step,~~ a communication protocol corresponding to the first ID is set and a connected party corresponding to the second ID is set.

20. (currently amended): ~~A communication processing method according to claim 19,~~ A communication processing method, comprising:

an object identifying step of obtaining first and second IDs corresponding to objects based on information input from a sensor, which detects the objects, and repeatedly outputting the obtained first and second IDs to an information processing unit based on the information input from the sensor; and

an information processing step of repeatedly receiving the first and second IDs obtained in the object identifying step and performing a program corresponding to the IDs,

wherein, in the information processing step, a communication protocol corresponding to the first ID is set and a connected party corresponding to the second ID is set, and wherein, ~~in the information processing step,~~ when at least one of a communication protocol and a connected party corresponding to first and second newly-input IDs is different from at least one of a communication protocol and a connected party corresponding to first and second already-input IDs, the communication protocol or the connected party is changed based on the corresponding newly-input ID.

21. (currently amended): A computer program for executing information processing, the program comprising:

~~an object identifying step of~~ obtaining an ID corresponding to an object ~~based on information input from~~ located within a sensor effective area continuously sensed by a sensor~~, which detects the object, and repeatedly~~

outputting the obtained ID to an information processing unit based on the information ~~input from~~ sensed by the sensor; and

~~an information processing step of repeatedly receiving~~ processing the ID obtained corresponding to the object ~~in the object identifying step~~ and performing a program corresponding to the ID;

wherein~~, in the information processing step,~~ a program that is set based on a newly-input ID is compared with a program that is set based on an already-input ID, and a currently-executed program is ended when the two programs are different from each other.

22. (currently amended): A computer program for executing communication processing, the program comprising:

an object identifying routine programmed to obtain~~step of obtaining~~ first and second IDs corresponding to objects detected within a sensor effective area of ~~based on information input from~~ a sensor~~, which detects the objects,~~ and repeatedly outputting the obtained first and second IDs to an information processing unit based on the information provided by ~~input from~~ the sensor; and

an information processing routine programmed to receive ~~step of repeatedly receiving~~ the first and second IDs sensed and provided by the sensor~~obtained in the object identifying step~~, the information processing routine programmed to perform ~~and performing~~ a program corresponding to the IDs;

wherein~~, in the information processing step,~~ a communication protocol corresponding to the first ID is set and a connected party corresponding to the second ID is set.